DOCUMENT RESUME

ED 095 817 IR 000 953

AUTHOR	Coward, Richard E.
TITLE	British Library Systems Development: The National and International Environment.
INSTITUTION	British Library, London (England). Research and Development Dept.
PUB DATE	Jul 74
NOTE	8p.
EDRS PRICE	MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS	Information Systems; *Library Automation; Library Circulation; Library Collections; Library Cooperation; *Library Networks; *Library Planning; Library Services; *National Libraries; Systems Approach
IDENTIFIERS	British Library; Great Britain; International MARC Network

ABSTRACT

The systems approach is being applied to the re-organization of the United Kingdom Library system. The core functions to the national library organization are: (1) reference; (2) lending; (3) bibliographic services; and (4) general planning associated with the development of a national library and information system. Despite the immense potential of the institution, it has almost equally big problems. The Public Library community recently consolidated over 380 separate library authorities into 115. Each faces the problem of assimilating different systems into a new administrative and bibliographic unit. In spite of this turbulent scene, the British Library (BL) community hopes to develop a program providing both scientific information services and bibliographic services. The BL objective is to provide a reservoir of bibliographic records. To accomplish this objective, the systems approach will anticipate the development of the International MARC Network and do everything possible to ensure that records coming through this network can be found and used with as little modification as possible. (WCM)

ED 095817

BRITISH LIBRARY SYSTEMS DEVELOPMENT: THE NATIONAL AND INTERNATIONAL ENVIRONMENT

by R. E. Coward

The formation of the British Library

The central library scene in the United Kingdom just before the British Library was formed was a little complicated. There used to be six separate institutions which broadly speaking occupied the commanding heights of the United Kingdom Library system. In strictly alphabetical order these were

The British Museum Library
The British National Bibliography
The National Central Library
National Lending Library for Science and Technology
The National Reference Library of Science and Invention
and finally the Office of Scientific and Technical Information

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

R 000 953

Some of these institutions may be familiar to you by name - the sum of their functions was certainly impressive. There were two great reference collections: The British Museum Library and the National Reference Library of Science and Invention.

The inter-lending function was likewise represented by two institutions. The National Lending Library for Science and Technology which was established as recently as 1962 in Yorkshire was certainly the best lending service in Europe and perhaps even the best in the world. It received some 2,000,000 requests per year - mostly for serials. The National Central Library in London was probably not so well known. It was a loan collection concentrated in the humanities, and a national union catalogue containing the holdings of over 300 libraries. As a union catalogue it was as union catalogues go, less than perfect.

On the bibliographic services side we have the British National Bibliography which was - or to be more exact, still is, since the process of assimilation is not yet finalised - the source of a wide range of printed bibliographic and MARC tape services to the library community.

Finally there was one institution - certainly the smallest - which joined the British Library some 14 weeks ago. This was the Office of Scientific and Technical Information which has - since 1965 - been responsible for the financing, through a series of grants, most of the research and development activity in the United Kingdom associated with the provision and use of scientific information services and the provision and use of MARC records in libraries.

The assimilation of OSTI into the British Library is an event of special significance. In its short existence of less than 10 years the extension of its fields of activity reflect very accurately a national shift of opinion. In 1965 it was concerned with the promotion of research and development within the fields of scientific and technical information. Sometime later these terms of reference were extended to cover the natural

and social sciences and are now widened even further to cover the arts, the humanities and sciences. In short we have learnt, as other countries have learnt, that libraries and information services are linked together and that there is nothing unique about scientific information services except the effort that has been put into them.

So much for the pre-British Library Institutions.

They ranged from private enterprise in the shape of the British National Bibliography through supported services to government departments. They formed as I have said the commanding heights of the UK library community. To consider bringing them together into a national organisation would have seemed as little as 10 years ago a mere pipe dream. Today it is very nearly a reality. The British Library was officially formed with the amalgamation of the reference and inter-lending institutions in 1973. Early this year it assimilated the Office of Scientific and Technical Information. Later this year the original design will be complete with the assimilation of the British National Bibliography.

It should be clear from this that we are not just engaged upon a process of tinkering here or jacking up there. There is a remarkable re-organisation under way which is very nearly complete. However, it will be appreciated that a re-organisation of this nature can either have shadow or substance. When I was speaking at the Illinois clinic some four years ago I was introduced to two new very expressive American words which have since been transferred to British Library systems terminology. They were glitch and kludge. We have certainly had our glitches since then and obviously there was the danger that the British Library would become the kludge of the century. A kludge - let me remind you - is "an ill assorted collection of poorly matching parts forming a distressing whole". This danger has been removed by fairly vigorous systems approach to the structure of the new organisation. There are several easily defined core functions that are the concern of a national library organisation. They are briefly reference, lending, bibliographic services and the general planning associated with the

development of a national library and information system. In essence the structure of the British Library follows this fundamental analysis. There is a Reference Department which is responsible for the two national reference collections now known as the British Museum Library and the Science Reference Library ; there is the Lending Division which manages a massive collection built up for lending purposes as well as the operation of a national union catalogue system; there is the Research and Development Department which is so recently formed that it would be presumptuous to define its total role but within that department must reside the major responsibility for information system research and development in the United Kingdom. Finally there will be the Bibliographic Services Division which will maintain the general cataloguing operation for the British Library and provide the national bibliographic services of the library community.

Put these functions together and you have in the British Library an institution of immense potential but an institution with almost equally big problems. However, even though the central operation has been planned in the grand manner it is - at least as far as upheaval and reorganisation is concerned - a fairly minor operation compared with what is happening in the Public Library community in the United Kingdom. Some 2 or 3 months ago there were over 380 separate library authorities in England and Wales. Today there are only 115. Some of these are large with populations of over 1,000,000. All of them are facing the problems of assimilating different systems into a new administrative and bibliographic unity. The library world in the United Kingdom is really being stirred up. We have a completely new bibliographic superstructure at the centre and new large scale library authorities in the community. In terms of library and bibliographic systems development the effect has been to create - at precisely the right moment - an organisation capable of exploiting the new MARC and information services potential at the centre, and a library community that is quite suddenly organised into large units that have both the technical expertise and the resources to demand and utilise the most sophisticated forms of bibliographic service. So if it is true, as I believe, that the development of library automation is initially dependent on enthusiasm, flair and optimism but finally dependent on the nature of the library service structure of a country then we have, for once, put the horse before the cart.

BL Systems Development

So much for the re-modelling of the British Library community. We are now faced with the task of injecting into this fairly turbulent scene a programme which covers both the development of scientific information services and the development of bibliographic services. In terms of acronyms the British Library is as deeply involved in UNISIST as it is in UBC (or Universal Bibliographic Control). This is a fact which is potentially of great significance to the British Library's attitudes towards international bibliographic systems development. We will do everything possible to promote the development of single international system with common standards. As far as system design is concerned, all our eggs are in this basket.

As far as systems development is concerned the British Library's basic objective is to provide - in the most convenient possible form - a reservoir of bibliographic records which can be utilised by the library community. To begin with this reservoir will have five streams of intake. The first stream will be the UK copyright stream. This is running at about 35,000 records per year at the moment and we do of course have a fully operational MARC service to hand for creating and distributing these records.

The second stream is the foreign UK MARC tapes as they become available. For the moment that is more or less equivalent to LC/MARC which is the bibliographic bargain of all times.

The third stream of input will be generated by the BL internal cataloguing operations as they are converted to MARC. This process will begin next year.

The fourth stream of input will come through ISDS.

An avalanche or trickle?

The fifth stream of input will cover back file conversion. We are fortunate in that we have a natural conversion situation in the shape of a national copyright file covering the last 25 years in the British National Bibliography and it is proving a reasonably painless business to convert the ½ million or so records it contains. This file will cover above 80% of public library stock so in that area at least we have got the situation under control.

These five streams of records will provide the nucleus of a bibliographic data base and the control point of an effective and economic network through which data will flow in many different ways and in many different media. The data base is being used as the source of the main printed or microfilm bibliographical services of the country. Most of these are direct products of the British Library like the British National Bibliography itself for example. But the British Library does also have a special responsibility for specialised and non-book media bibliographic control and when and where appropriate its bibliographic computer system and some systems support is placed at the disposal of other agencies. This enhances the national data bank, increases the level of bibliographic service and virtually guarantees a high and standardised quality of products.

Secondly the data base is being used to supply either a full or selective tape service to libraries. These services will cover all foreign tapes as they become available. All we do is to map all incoming records into the national MARC structure and pass it out onto the network. The context of the record is left strictly alone.

There are two basic principles in operation here. The first is that there must be the maximum convenient availability of all international MARC records in the UK network. It is neither convenient nor economic for libraries to learn how to handle other MARC tapes so we will provide them in a converted form. We would in fact like to see an international system evolve which elevated this practice into a standard responsibility for each national agency so that they acted as distribution agents for other national MARC tapes. The second principle is more of a reflection of economic reality. We can afford to repackage but not to recatalogue.

It was, I remember, an American librarian who said that it is impossible for any one nation by its own efforts to provide the bibliographic services required by its library community. I will add a footnote to the effect that most of us can't even afford to muck about with other countries' MARC records. With this basic approach the development of international bibliographic standards is a matter of considerable importance to the British Library

community. We need standards to make our MARC system work efficiently. We need a unified code; we could do with a standard international MARC implementation to carry the records between national MARC agencies; I would like to see some small step taken towards an international agreement on subject information in MARC records even if it is only the long awaited Standard Reference Code or Subject-field Reference Code as it must now be called. In short, the systems approach to the British Library is that it will anticipate the development of the International MARC Network and do everything possible to ensure that records coming through this network can be found and used with as little modification as possible. After all, we already have in the International Standard Bibliographic Description what is virtually a core record in an international standard and with a unified code we will have the official AACR heading for most English language books. As far as finding the record is concerned we will pin our faith entirely on the development of the international standard book numbering system.

Technical Development

In terms of technical development there is very little that I can usefully say at the moment. You must remember that the Bibliographic Services Division of the British Library has not yet been formed and we have not as yet carried out the necessary technical and market studies on which a final system will be based. However, we are currently involved in a fairly extensive upgrading of our national MARC system to cope with immediate requirements of the British Library and the library community. For the future we only have to look across the Atlantic to see the trend. Librarians will demand direct access to an international data bank and they will want to transfer records from the data bank to their local computer systems as a basis for local computer based catalogues. One singular difference between the UK and the US library automation scene is that only one library in the UK to my knowledge has used a computer and MARC records to produce a card catalogue. This is a difference that has puzzled me for some years. All of our computer systems produce microfiche or film catalogues. Perhaps the sheer excellence of the Library of Congress cards

has brainwashed a generation of American librarians. The common factor between the UK and the US is that there is a broad direction of development towards bibliographic network which has a mixture of on-line capability and off-line services. At present we find it cost effective to develop the off-line elements of the services but I don't think this phase is going to last for very long. A country which has about 250 major library centres requiring direct terminal access grouped in a tight little network radius of about 250 miles is large enough to generate a satisfactory level of traffic and small enough to function as a single network. However, the development of efficient bibliographic networks in the UK and Europe is very dependent on national telecommunication policies. This is an obscure area at the moment but we have our hands full for the next two years anyhow.